



AKU Annual Reports Publications

1993

The Aga Khan University Annual Report: 1993

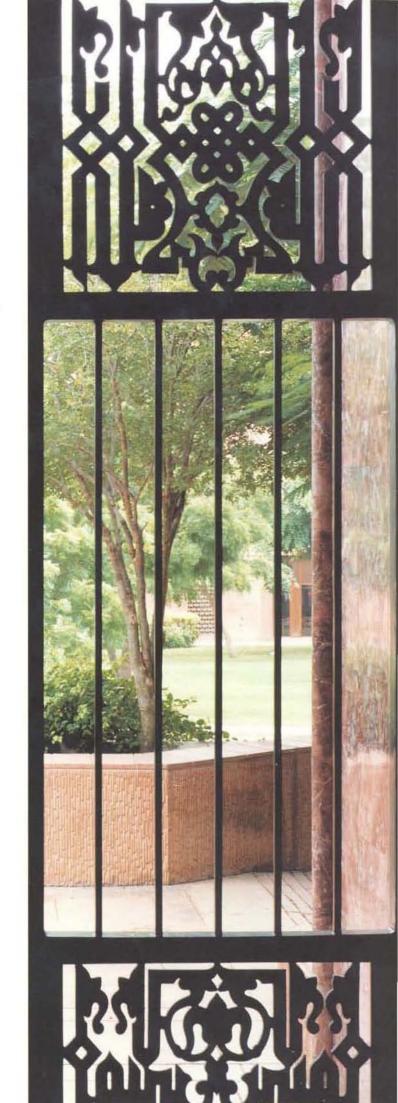
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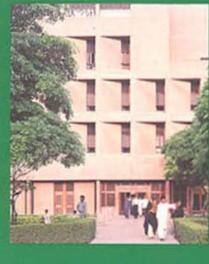
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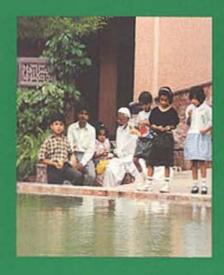
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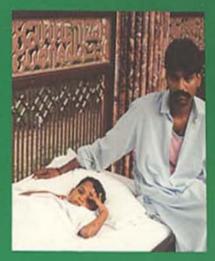


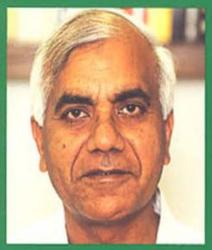
THE AGA KHAN UNIVERSITY

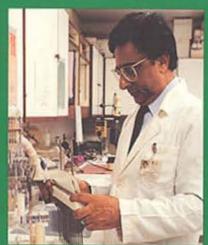


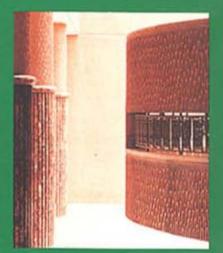


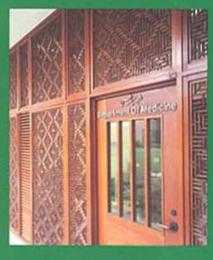


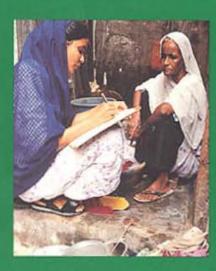








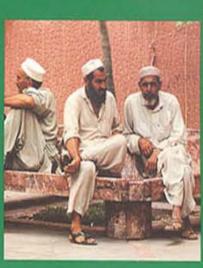






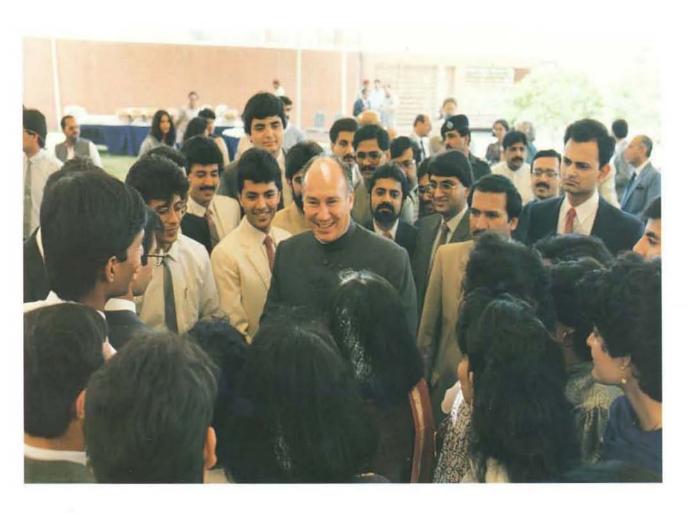






THE AGA KHAN UNIVERSITY ANNUAL REPORT 1993

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"It is my wish that this should become an international University, able to mobilise resources from other countries, to co-ordinate international research and to encourage the exchange of ideas between nations"

> His Highness The Aga Khan Chancellor 16 March 1983

MESSAGE FROM THE BOARD OF TRUSTEES

The first decade of the Aga Khan University has seen significant growth and development. These achievements have not come easily, and have demanded extraordinary commitment, dedication, teamwork, and above all steadfastness to its mission and objectives. The challenges on the journey to the decade milestone, and the achievements in such a short span of time, have set the stage for the future evolution of The Aga Khan University. The University will continue to be guided by the vision of its founder, and strive for excellence in all its endeavours with the participation and support of its friends and well wishers. Poised at the threshold of its next decade, the Aga Khan University eagerly aspires to new achievements and greater challenges.

> Sahabzada Yaqub-Khan Chairman, Board of Trustees



Board of Trustees (from left to right)

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His Highness The Aga Khan Chancellor

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Dr. J. Fraser Mustard President and Senior Fellow, The Canadian Institute for Advanced Research, Toronto

> Begum Taharunnesa A. Abdullah Consultant, Rural Development and Women's Programme

Dr. John H. Dirks Acting Rector, The Aga Khan University and Dean of the Faculty of Health Sciences

> Dr. Naseer Ahamed B. Shaikh Chairman, University Grants Commission, Pakistan (not in the photograph)

INSTITUTIONAL OVERVIEW

The Aga Khan University (AKU) completed the first decade of its founding with a number of major developments in 1993. Foremost amongst these was the launching of the Institute for Educational Development (IED), the first academic programme beyond the health sciences. IED's mission is to enhance, through training and research, the quality of education and the status of the teaching profession in Pakistan and the region. In selecting this new field, the Chancellor and the Trustees were mindful of the fact that like nursing, teaching is one of Pakistan's most underprivileged profession and is made up predominantly of women.



Levi N. Hilling, Director-General, AKUH, Shamsh Kassim-Lakha, President, The AKU Centre, and Dr. John H. Dirks, Acting Rector, AKU and Dean of FHS.

With the support of its Partner Universities of Oxford and Toronto, AKU offers an eighteenmonth graduate programme, leading to the Master of Education degree. With the assistance of its graduate Master Teachers, IED will offer an innovative teacher continuing education programme, consisting of short, intensive courses in actual classroom settings. To lead this effort, we are pleased to welcome the first Director of IED, Dr. Kazim Bacchus. Dr. Bacchus is an eminent educator and former Director of the Department of Educational Foundation at the University of Alberta, in Canada.

Nearly two years ago, the Board of Trustees appointed an important ad hoc committee to review the strategic direction and resource requirements of the Medical Centre (comprising of the University and the teaching Hospital) for the next ten years. This committee, called the Medical Centre Committee (MCC) and chaired by Dr. Robert Buchanan, a trustee who was also General Director of the Massachusetts General Hospital, submitted its final report in July of this year.

The MCC report recognized the Faculty of Health Sciences' important accomplishments in medical education but underscored the need to realign education and research programmes to ensure the broadest possible exposure of AKU students and residents to the community medical practice environment. The report also stressed the importance of the presence of well-trained, committed general physicians in Pakistan's health care system, particularly those with expertise in treating infectious diseases and problems associated with poverty and poor living conditions. As one consequence of this recommendation, AKU has initiated a post-graduate Family Medicine residency training programme.

MCC endorsed the adoption of an "alternative services" model of care at the Aga Khan University Hospital (AKUH), placing emphasis on ambulatory and outpatient diagnostic and treatment services. The committee's report noted that this strategy was consistent with the worldwide evolution of hospital services and represented an appropriate focus to meet the needs of patients in Pakistan. At the same time, MCC recognized the need for AKUH to strengthen and expand its subspecialty and carefully selected tertiary services, to meet the needs of the population served by the Hospital and to fulfill training objectives for postgraduate medical residents. In response, the Board approved implementation of a comprehensive cardiology programme at AKUH, including cardiac angiography and open heart surgery. I am delighted to report that the funding of Rs. 60 million (US\$ 2 million) for the expanded cardiac programme has been contributed by sixty individual and corporate donors in Pakistan. This generosity, from such a diverse group of donors reflects widespread confidence in AKUH's ability successfully to mount this major new initiative, with an expectation of internationa standards of quality.

To provide resources for new capital project to double the size of AKU's endowment and to obviate the undesirable practice of the university spending all of the earnings from its corpus, the MCC also recommended the mounting of a major fund raising campaign Consequently our 1993-99 fund raising drive was launched with great success in the United States where the University received over US\$11 million in new donor pledges. In addition to the extraordinary donor support for AKUH' expanded cardiac services programme, a ver-

generous donation of Rs. 90 million (US\$ 3 million) was committed by a philanthropist family in Lahore, Pakistan. This major gift will provide a much needed permanent home for our five-year old Bachelor of Science in Nursing (B.Sc.N.) programme — still the only nursing baccalaureate degree programme in Pakistan. These inaugural successes of our six-year campaign, targeted to raise US\$ 48 million, have set the pace for subsequent drives planned in a number of countries.

Based on the proposal by the MCC for a more effective and unified mode of governance, the Chancellor and the Trustees decided that the responsibility for the governance of the University Hospital should transfer from the Owner's Representative Board (ORB) to the Board of Trustees of the University. Accordingly, the Hospital Committee appointed by the Board, consisting of Trustees as well as knowledgeable and experienced members in hospital administration from within and outside Pakistan, assumed this important function in 1993. The University owes its deepest gratitude to ORB, which has been responsible since 1976 for overseeing the major task of planning and construction of the Medical Centre and governance of the Hospital.

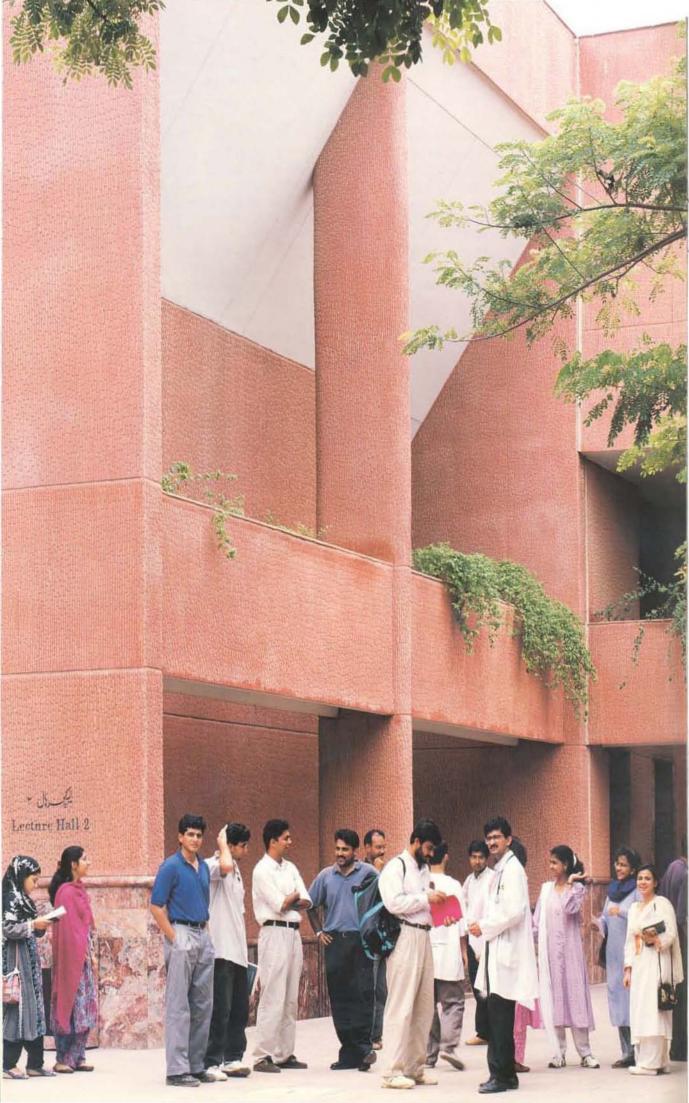
In 1993 the University experienced important changes in its academic leadership. After serving his three-year term as Dean of the Faculty of Health Sciences, Dr. James Bartlett stepped down and was succeeded by Dr. John Dirks, a renowned Canadian medical academic whose many notable achievements include serving as the Dean of Medicine at the University of Toronto. Also retiring from AKU in 1993 after nine years of distinguished service was Dr. John Bryant, the Noordin M. Thobani Professor and Chairman of the Department of Community Health Sciences. For his leadership of the department, which led to wide recognition of its programmes, the Board honoured Dr. Bryant, by investing him as the Noordin M. Thobani Emeritus Professor of Community Health Sciences. Dr. Bryant's successor, Dr. Joseph McCormick, is a highly reputed scientist and former career officer at the Center for Disease Control and Prevention in Atlanta, USA. We are fortunate to have such outstanding continuity of leadership in these key positions.

Over the years, many overseas health professionals have expressed interest in serving the Medical Centre. In fact, many have frequently worked at the campus in a voluntary capacity. In December, to promote greater collaboration with overseas health professionals, AKU and the Aga Khan Health Services, Pakistan, hosted approximately twenty-five health professionals who travelled to Pakistan at their own expense under the aegis of the Aga Khan Health Board for Canada. This worthwhile visit has led to the identification of several beneficial collaborative initiatives in administrative as well as medical and nursing clinical areas. We look forward to the systematic development of these initiatives in the future.

I am pleased to report that in 1993, with sound marketing approaches, careful husbanding of its resources and control over its costs, AKUH generated sufficient income to cover its operating expenses and two-thirds of its depreciation. It also provided support of Rs.30 million (US\$ 1 million) to needy patients from income generated by the Hospital's Patient Welfare Endowment. The Medical Centre's Continuous Quality Improvement programme, launched last year, is progressing satisfactorily and is expected to contribute significantly towards raising both the quality and cost-efficiency of our services.

I would like to conclude by acknowledging our deep gratitude for the unceasing support given by the University's dedicated friends, wellwishers, volunteers and donors. You have been crucial in sustaining AKU's continuing growth and development. Through a variety of academic and social events in 1994, with the theme of "A Journey Just Begun", the University will celebrate its tenth anniversary. It has recorded an impressive list of achievements thus far, but these have demanded an extraordinary commitment, devotion and teamwork from the Trustees, the Faculty, the staff and the volunteers to whom go our warmest appreciation. Much progress, however, remains to be made towards the mission envisioned for AKU by its founder and Chancellor, His Highness the Aga Khan, and the Trustees. With continued support and dedication of our entire team. I am confident that the Aga Khan University can aspire to greater heights as it stands on the threshold of its next decade.

Shamsh Kassim-Lakha President, The AKU Centre

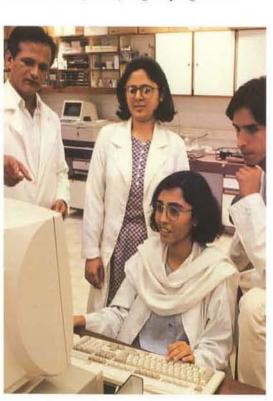


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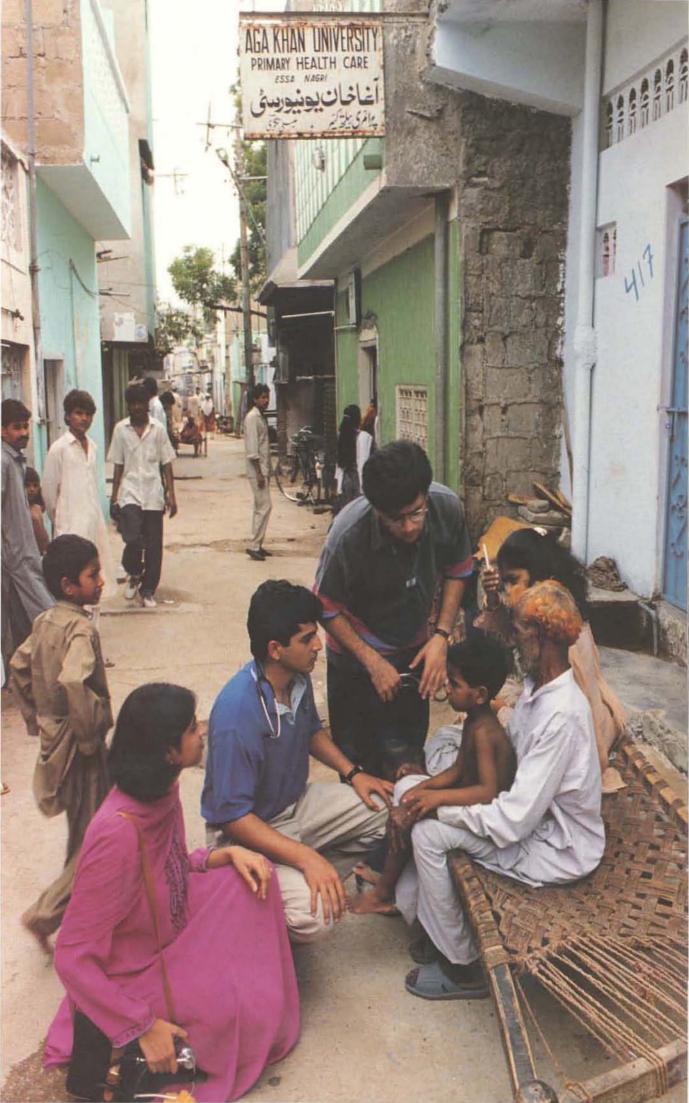
ACADEMIC PROGRAMME

Ten years is but a moment in the life of universities, but nevertheless an important milestone to evaluate achievements and reassess objectives.

The Aga Khan University (AKU) reached such an historic milestone in 1993, when it completed the first decade of its founding since the charter was granted by the Government of Pakistan in 1983. From that time, under the inspiration and guidance of its Founder and Chancellor, His Highness the Aga Khan, and its Board of Trustees, the University has set for itself high standards and pursued excellence in all activities - earning recognition in Pakistan and overseas. The completion of the decade also saw the University's first initiative in education as an academic subject. outside the sphere of health sciences. The Institute for Educational Development (IED), which will begin classes in January 1994, aims to enhance the quality of education and the status of the teaching profession in Pakistan and other developing countries of Asia and Africa. It will do this by providing in-service training of teachers and conduct classroombased and policy-related research. An important beginning has been made through the creation of an innovative field-based Master of Education (M.Ed) Degree programme.







FACULTY OF HEALTH SCIENCES

MEDICINE:

In 1993 the Medical College conferred M.B., B.S. (Bachelor of Medicine, Bachelor of Surgery) degrees on 54 graduates of its sixth class, bringing the total number of graduates to-date to 411. In addition, 12 residents completed their formal postgraduate training in clinical specialties: one in Anaesthesia; five in Medicine; one in Obstetrics/Gynaecology; two in Paediatrics; and three in Surgery.

This year, the achievements of two residents trained entirely at the Aga Khan University Hospital, reflected the high standards of its Residency Training Programmes. Dr. Farhat Abbas, Senior Instructor in the Department of Surgery, became the first Pakistani and the first Asian trained in his native country, to be awarded the G.B.Ong Gold Medal by the Royal College of Surgeons of Edinburgh for his superb performance in the examinations for Fellowship of the Royal College during the year. This Medal is awarded each year to an individual who tops the list of successful candidates appearing in the FRCS examinations in Surgery, Also, Dr. Khalid Khan, Senior Resident of the Department of Obstetrics and Gynaecology, was awarded the Organon Family Planning Scholarship for 1993. This Award is given to encourage research and programme development in Family Planning and Maternal/ Perinatal health. Only one scholarship is awarded each year in a worldwide competition, and Dr. Khan is the first Pakistani to receive this Award, which was presented to him at the Annual meeting of the Asia-Oceania Obstetrical and Gynaecological Society in Manila. The scholarship will support Dr. Khan for a year of postgraduate study in Epidemiology, related to Fertility and Maternal Mortality.

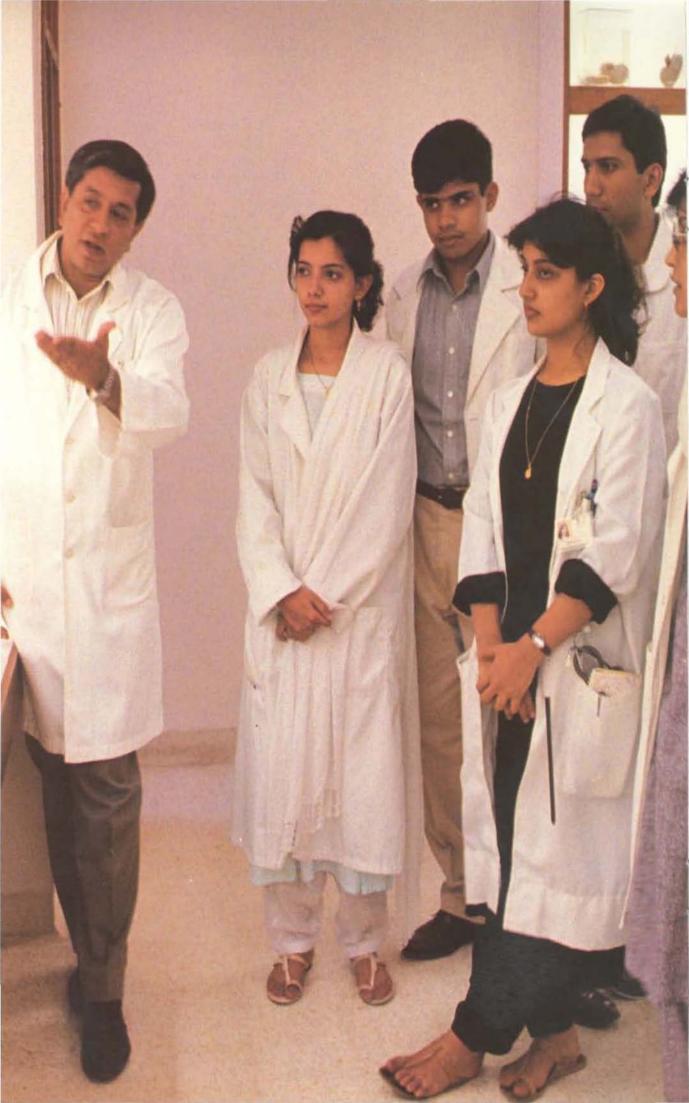
New postgraduate training programmes in Urology and Otolaryngology (ENT) at the Aga Khan University Medical Centre were approved and recognized in 1993 by the College of Physicians and Surgeons of Pakistan. A significant addition to the postgraduate training programmes, and the first of its kind in Pakistan, is the Family Medicine Programme. Instituted in 1993, training has been specially designed for competence in both clinical and community health work — an important need for urban and rural populations. Faculty and

curriculum development, to ensure implementation and growth of this programme, is being planned with the assistance of the Department of Family Medicine at McGill University in Montreal.

Outreach Initiatives:

Promotion of human welfare in general, and the welfare of the people of Pakistan in particular, are major commitments of AKU. The University does this through research, training, and service initiatives. In 1993 some of the University's community-based involvements included:

- A four-year international project: "Culture and Drug Abuse in the Asian Setting". Six Asian countries are collaborating in this research, and the Karachi Project is being carried out by AKU's Departments of Psychiatry and Community Health Sciences, the Karachi University, and the Notre Dame Institute of Education in Paris.
- The development of an Anxiety and Depression Scale, involving the Departments of Psychiatry and Community Health Sciences, contains the first questionnaire of its kind in the Urdu language for assessment of patients. It has already been validated in the Psychiatry Clinics at the University Hospital, and will soon be put to test in community settings. Data collected through these questionnaires will be relevant for assessing symptoms described by the populations that AKU serves.
- The Thatta Health System Research Project, funded by the International Development Research Centre (IDRC) Canada, and launched in partnership with the Department of Community Health Sciences at AKU and the Department of Health of the Government of Sindh, is now in its third phase. It is exploring ways of strengthening a district health system with specific emphasis on maternal and child health. The experience gained has helped implement interventions aimed at strengthening the national health system in general, and the health information system in particular. The project's experience has also concurrently assisted the World Bank funded Family Health Project, which aims to train and strengthen skills of the various categories of health personnel, and for which the advisory and manpower training services of AKU's Department of Community Health Sciences has been retained by the Government of Sindh.



Research and Faculty Honours:

Among the wide range of research activities at AKU, some new developments and achievements are:

- Professor S. A. Saeed of the Department of Pharmacology reported, for the first time in international peer reviewed scientific journals, the presence of an inhibitor in human cerebrospinal fluid that inhibits the formation of Thromboxane A2, a finding that may be of much importance in understanding strokes and inflammation.
- Dr. Rabia Hussain, the Gulamali Hirji Professor, and Dr. Rumina Hasan, Assistant Professor, at the Department of Microbiology, whose work on the immunological basis of Tuberculosis and Leprosy has earned international recognition, secured new grants from the WHO/UNDP Programme for immunological studies in both Tuberculosis and Leprosy, which may lead to insights into antigens important in vaccine development for these diseases. Another grant for Professor Hussain's research work for classifying strains of mycobacteria, was provided by the European Economic Commission. She is a member of the Steering Committee of the World Health Organisation on immunology of mycobacterial diseases. Professor Hussain was invited to make a presentation on: "Immunology of Leprosy" at the Fourteenth International Leprosy Congress in Orlando, Florida.
- Dr. Mohammad Anwar Wagar, Tamgha-i-Imtiaz, the Akberali H. Bandeali Professor and Chairman of Biochemistry, was awarded a grant by the Islamic Development Bank to study "The Immunostimulatory Role of Vitamin A and E against Cancer Cells". For his contributions in the field of Chemistry, Professor Wagar was elected to the Fellowship of the Third World Academy of Sciences, Italy, and to the Fellowship of the Pakistan Institute of Chemists. He also served as a member of a Committee of the Ministry of Science and Technology for Evaluation of Basic Science Departments of Research and Development Organizations. Professor Wagar was invited to speak on: "Impediments in Conducting Research in Islamic Countries" at the International Congress for the Advancement of Science and Technology in the Islamic World, at Teheran University. He is the first overseas recipient of the 1993 Convocation Medal of the Flinders University of South Australia, at Adelaide.

- Dr. Amir Ali Shoro, the Jafferali Lalji Professor and Chairman of the Department of Anatomy, was awarded a fellowship by the Association of Commonwealth Universities for a study of educational programmes at premier teaching institutions in India, Malaysia and Singapore.
- Dr. Amin Suria, the Noormohamed Shamji Professor and Chairman, Department of Pharmacology, had the distinction of being included amongst the scientists whose names are printed in American Men and Women of Science.
- •Dr. Bo S. Lindblad, the Kamruddin M. Jessani Professor and Chairman of the Department of Paediatrics, was appointed Adjunct Professor of International Child Health at the Karolinska Institute, Sweden, in November 1993. This appointment will enhance closer collaboration between AKU and the Karolinska Institute.
- Dr. Anwar Gilani, Associate Professor, Department of Pharmacology, was awarded the "International Salam Prize" in Biology, by the Third World Academy of Sciences, for his work on plant-derived material and related alkaloids leading to the discovery of Himbacine from plant sources. The importance of this compound has been established in its selectivity of action on the heart, and may be of significance in the treatment of heart condition where the rate of heartbeat is below normal.
- Dr. Rehana Kamal, Professor and Chairperson of the Department of Anaesthesia, was elected Vice President of the South Asian Confederation of Anaesthesiologists in recognition of her professional standing in Pakistan and major contributions to the functioning of this regional body.





NURSING:

The performance of the final year Diploma students of the Aga Khan University School of Nursing (AKUSON), in the Sindh Nursing Board examinations in 1993, reflected the high standard of their education. Of the 78 students who took the examination, 93% passed. Of this group, 91% passed in the First Division, with the top three positions going to AKUSON students Eight students, including Ms. Justina Mungai, an overseas student from Kenya, achieved honours. The Diploma Programme admitted 34 students from rural and underprivileged areas to its special course in 1993. This programme has been especially developed by the School of Nursing, in addition to its regular programmes, to overcome learning handicaps and enhance the proficiency of educationally disadvantaged students in the English language and the Sciences. The School hopes that these students would eventually return and serve their own communities.

The Baccalaureate Programme, designed to train leadership in nursing services and nursing education, graduated 27 students in 1993, bringing the total number of B.Sc.N. graduates to 80 since its inception. In addition, it continued to attract individuals wishing to take single courses for credit. AKUSON admits such students to select courses on a space available basis. Forty-five such students enrolled in six separate courses in 1993, and will be given credit for these courses should they later decide to join the B.Sc.N. programme.

Both the special and single course programmes are part of the School's efforts and initiatives for motivating young women in Pakistan to consider nursing as a serious option when weighing career choices.

Resource for the Nursing Profession:

Increasingly, AKUSON is serving as a major resource for the nursing profession. For over a decade the School has been assisting the Pakistan Nursing Council (PNC) and the Sindh Nurses Examination Board in preparing teachers to implement the revised Diploma Curriculum. In 1993 AKUSON was additionally requested to hold training sessions to prepare Nurse Examiners. This was the result of an important decision taken by the Nurses Examination Board to have Nurse Examiners for nursing students.

As a result, for the first time in Pakistan, all the Board examinations for Year-One students were conducted by nurses, whereas in the past these tests were conducted by physicians.

AKUSON also made available its physical and faculty resources to the PNC for conducting a variety of workshops for nurse teachers from across Pakistan. These included workshops on: Community Health Nursing and the Nursing Process.

Faculty Development:

- •Four faculty members rejoined AKUSON after having successfully completed their Master's degree in Nursing in the USA. A notable first for the School was the promotion of Yasmin Amersi and Nelofer Halai, two national faculty members, to the rank of Assistant Professor.
- Faculty members participated and presented papers at conferences in Pakistan as well as in the UK, USA, Canada and Malaysia, reflecting growing recognition of the School overseas, and the calibre of its faculty.



Expansion Programme:

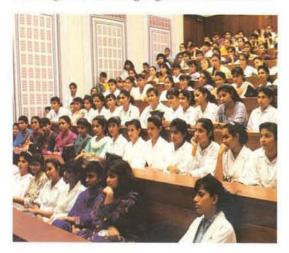
An exciting development during 1993 was the decision by the Board of Trustees to expand the School of Nursing facilities. The remarkable generosity of a single donor from Pakistan has made this possible. The School acknowledges with deep gratitude this magnanimous gift of Rs. 90 million (US\$3 million), which will increase its physical facilities by 20%. The expanded School of Nursing will house the B.Sc.N. Programme, the faculty offices of the English Language Unit, the Nursing Educational Services, and the Science and Skills Laboratories. The expansion is scheduled to be completed in 18 months by mid 1996.

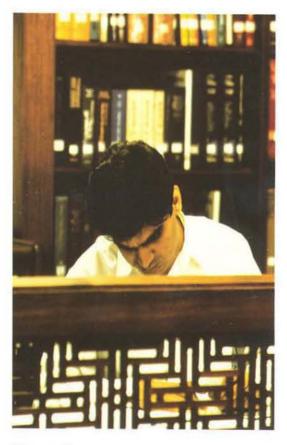
Convocation Seminar '93:

A Seminar marking the 1993 Convocation, highlighted the quality and depth of academic collaboration between faculty and students at AKU. Presentations made at the Seminar touched on a variety of subjects including: issues of intensive care; causes of child mortality in rural communities as reflected through verbal autopsies; family planning; hypertension; studies on diabetes and tuberculosis; identification of bacteria from the urinary tract; infertility; paediatric diseases; environmental health hazards; role of antibodies in diagnosis and treatment; protective properties of plants; parasuicide rates; depression; and the role of inbreeding in congenital deafness.

Along with Medical College students, nurses from the School of Nursing also participated in the Seminar, making presentations on quality nursing care, family nurse practices, special health care needs of children, and the role of the community health nurse. The Nursing Education Services of AKUH's Nursing Division demonstrated the newly introduced problem-oriented Medical Records System. This involves training nurses in the documentation of a patient's medical records following a problem-based method, from the time of admission at AKUH to discharge.

From the Department of Anatomy, research efforts undertaken in conjunction with the Wayne State University, USA, and Oxford University, UK, were displayed. The University's collaborative research efforts with Women's Health and Development Programme; Bangladesh Rural Advance Committee (BRAC); and Health and Nutrition section of UNICEF, Bangladesh; on issues of Safe Motherhood and Promotion of Breast Feeding, were also highlighted at the Seminar.





Library News:

A computerised Directory of Periodicals was completed. This will provide quicker access to the Library's resources. Other sub-systems such as acquisition, cataloguing, circulation, and serial control are also now computerised. The manual catalogue has been replaced with an On-line Public Access Catalogue (OPAC). Currently the Jivraj Health Sciences Library has a collection of over 15,000 books, and the Kurji Periodicals Library subscribes to nearly 500 international medical and nursing journals. The AKU Library has been registered as a WHO Reference Library. The criteria for this recognition are for the library to have a sizeable collection of WHO publications, and serve as a significant resource for a high standard of research and information.

The Library launched a corporate membership scheme in 1993, enabling pharmaceutical firms and other health care organizations to request literature search on CD-ROM, as well as photocopies of the latest journal articles. A nominal sum is charged for this public service so that more institutions can access resources available at the AKU Library.

> Dr. John H. Dirks Acting Rector, AKU and Dean of FHS

NSTITUTE FOR EDUCATIONAL DEVELOPMENT

Academic Advisory Council

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Director,
Institute for Educational Development,

The Aga Khan University

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Lecturer in Educatonal Studies, and Fellow of Keble College, Oxford University

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Dr. Dennis Thiessen

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Secretary of Education,

Government of Pakistan

Dr. Camer W. Vellani

Ibn-e-Sina Professor of Medicine and Associate Dean for Education,

The Aga Khan University

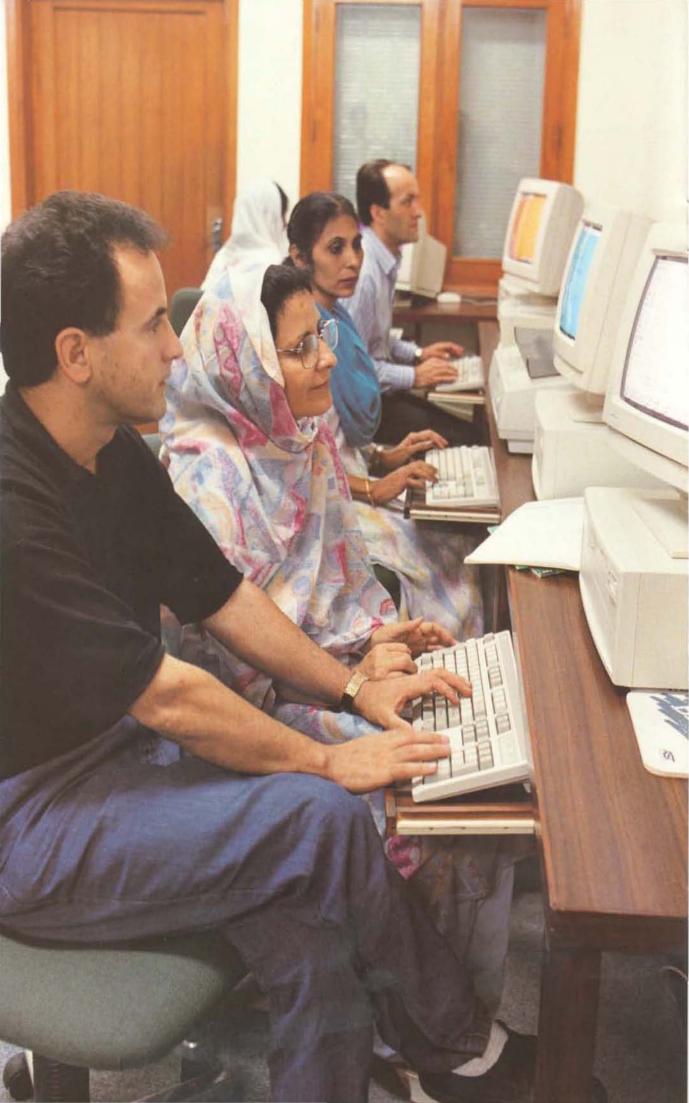
Ms. Shahnaz Wazirali

Special Assistant to the Prime Minister for Social Sector

Government of Pakistan

Established this year, the Institute for Educational Development (IED) is the latest addition to the Aga Khan University's academic programmes. The Institute, an





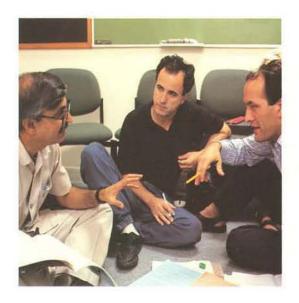
integral part of the University, is its first venture outside the field of health sciences. The mission of IED is to enhance the quality of education and status of the teaching profession in Pakistan by providing teachers with intensive in-service training courses, as well as conducting research in teaching and educational policies relevant to schools in developing countries. A number of international agencies have supported this initiative by contributing substantial funds for the first six years of IED's operations (see Finance and Funding section).

In July 1993, the first Director of IED, Dr. Kazim Bacchus, formally started his assignment. Dr. Bacchus who was born in Guyana, is a renowned educationist from Canada, and before joining AKU was Director of the Department of Educational Foundation at the University of Alberta's Faculty of Education, where he also served as Professor of Sociology of Education, and Director of the Centre for International Education and Development.

The Master of Education (M.Ed) degree programme, the first academic offering at IED, spread over 18 months, includes a two-month

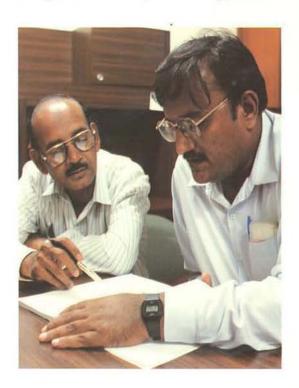






residency at either the University of Oxford or Toronto. These two Partner Universities of AKU are leaders in field-based teacher training in the United Kingdom and Canada, and support AKU's teacher training efforts in Pakistan through technical assistance and an exchange of personnel.

The first class of IED's innovative Degree Programme consists of 22 students drawn from public and private schools in Pakistan as well as from Bangladesh, Kenya, Tajikistan and Tanzania. From the ranks of the first graduates of the IED programme will also emerge recruits for its junior faculty positions.



The faculty will be based at a Professional Development Centre, to be built on the campus of the Sultan Mohamed Shah School in Karachi, and will impart in-service teacher training at this school setting.

The Institute's ultimate goal is to make a more effective contribution to human resource development, especially in Pakistan and in other countries in South Asia and East Africa, with the objective of helping to improve the



social and economic development of individuals and communities, through the school system. Towards this goal, the IED has already completed a small scale research report on Adult Literacy for UNESCO. The aim of this study was to shed light on some of the important resource constraints which adult education teachers face in their efforts to improve, both quantitatively and qualitatively, the level of literacy amongst females in Pakistan. In response to a request from the Education Department of the Government of Sindh, the IED is also evaluating curriculum models, produced for the World Bank's Sindh Primary Education Project, and currently in use in schools.

THE AGA KHAN UNIVERSITY HOSPITAL

Hospital Committee

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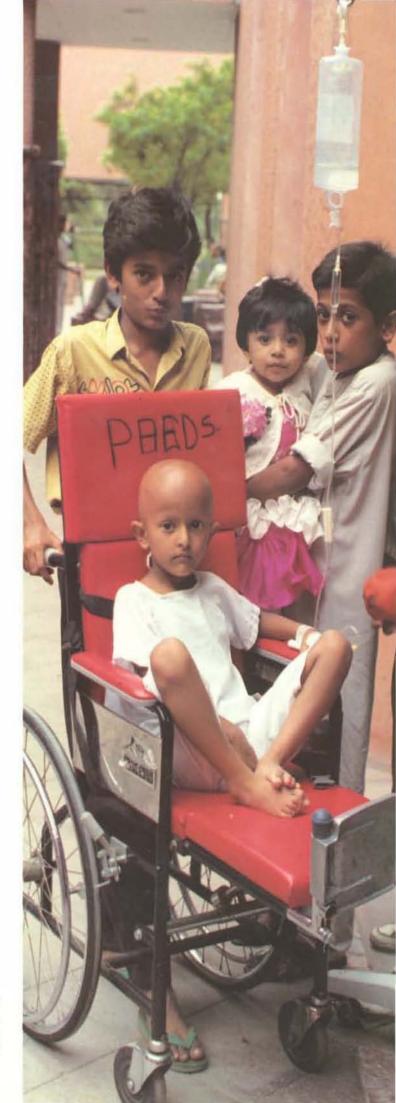
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Mr. Peter Smith Finance Director, Aga Khan Health Services, Geneva

The Aga Khan University Hospital (AKUH) is the teaching hospital of the Aga Khan University's Faculty of Health Sciences. 1993 was both a year of continued strengthening of





existing patient care services at the hospital as well as a year for planning important new services. Faculty and staff received training, and began applying service improvement techniques associated with the concept of Continuous Quality Improvement (CQI). As a result, service improvement initiatives were undertaken to reduce waiting times in the Clinics, enhance the efficiency of patient handling in emergency services, and streamline the inpatient discharge process. A major new programme for the expansion of cardiac services, to include cardiac catheterization, angioplasty and open heart surgery, was authorized by the Board of Trustees.

While inpatient volumes increased slightly over 1992, from 21,000 inpatients to 21,500, the total outpatient visits remained approximately the same at 226,000. However, the Hospital's financial performance further improved to enable an even greater share of its total cost of operations to be covered, than in 1992. Its income was sufficient to fund all its required equipment replacement, debt servicing, and 80% of its total depreciation.

Cardiac Programme:

During its first decade, the Aga Khan University Hospital has steadily built and strengthened its programmes and services, only taking on new commitments when the existing base was sufficiently secure. To address an urgent need for developing a comprehensive cardiac care programme of international standard in Pakistan. the Board of Trustees of the Aga Khan University approved the Hospital's first major tertiary care programme. It is planned for implementation in November 1994, and will encompass state-of-theart invasive cardiology, including angioplasty and closed and open-heart cardiovascular surgery, including adult and paediatric cardiac surgery, coronary artery bypass and valve replacement. Approximately 1000 inpatients and 9000 outpatients are expected to benefit annually from the Cardiac Programme, allowing the country to save substantial foreign exchange currently incurred on seeking such treatment abroad.

To ensure international standards and quality, linkages have been established with institutions in the United States and Canada to obtain assistance in developing AKUH's faculty and staff as well as patient care and support systems. During the summer of 1994, Dr. Sohaila Mohsin



Ali, a U.S. Board certified open-heart surgeon, who is Associate Professor in AKU's Department of Surgery, will head a team of AKUH nurses, anaesthesiologists and a perfusionist, in receiving refresher training at the University of Maryland. Dr. Joseph McLaughlin, Head of Cardiovascular Surgery at Maryland, is their host and is coordinating their programme at Maryland. In October 1994, Dr. McLaughlin and his surgical team will travel to Karachi where they will spend several weeks assisting in the implementation of the programme. Dr. McLaughlin is also helping AKUH to arrange for heads of cardiovascular units at other academic medical centres in the United States to follow him as visiting faculty at AKUH after his departure.

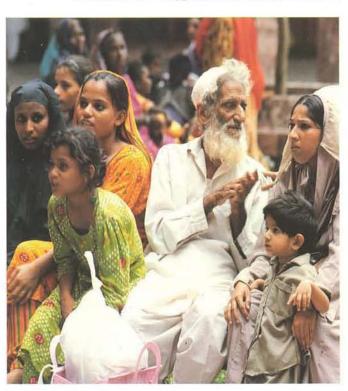
A second important linkage has been established with Sudbury Memorial Hospital (SMH), one of Canada's premier comprehensive cardiovascular centres. Arrangements have been made for cooperative ventures and exchange of staff in the development of cardiac care systems at AKUH. In October 1994, Dr. Alnoor Abdulla, former Chief of the Cardiovascular Department at SMH and present Director of its Nuclear Cardiology, will assume the position of Chief of the Cardiology Service at AKUH.



Ambulatory Care:

The Hospital's emphasis in 1993 on ambulatory care was visible through various outpatient initiatives. Prominent amongst these were:

- The establishment of a Paediatric Uro-Nephrological Collaborative Clinic. This service will enable simultaneous evaluation of the patient by an Internal Medicine physician and a surgeon both specialising in kidney diseases. A Growth and Development Clinic was also started as a result of a six-week visit to the Karolinska Institute Medical University in Stockholm, by Dr. Kamran Yousuf, a Paediatric Endocrinologist, and Dr. Iqtidar Ahmed Khan, a Paediatric Nephrologist.
- Evening clinics were initiated in General and Paediatric Surgery, in addition to the existing Paediatrics and Medicine Clinics, to enhance access for working parents and office workers.



- Four additional examination rooms were constructed in the Consulting Clinics to facilitate smoother patient flow, and cater to the increasing demand for clinics.
- A sixth dental chair was installed in the Dental Clinic in response to increasing patient loads.
- •The Clinical Laboratory started a Pheresis Service, which includes plasma pheresis, leucopheresis and platelet pheresis. This

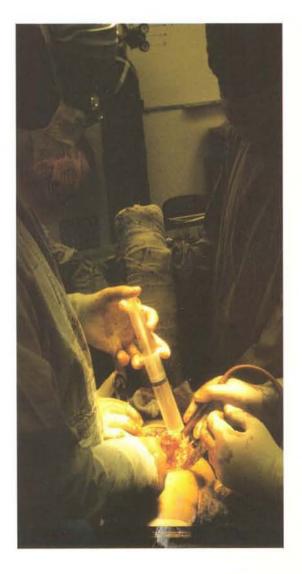
facility will enable the Laboratory to make available blood products such as platelets, and white cells, and will help in providing treatment for neurological and haematological diseases.

Inpatient Care:

- •A new Paediatric Gastroenterology and Nutrition Ward, providing care to seriously ill children with infectious diarrhoea or malnutrition-malabsorption syndromes, was established under the care of Dr. Sohail Thobani.
- Operating room usage time was increased from nine to twelve hours a day to accommodate the increase in surgical workload. Additionally, the number of anaesthetists were increased through the recruitment of two Pakistanis from the USA at the Assistant Professor level, and a consultant from Poland.
- The third floor of the Hospital's Private Wing added 10 more beds to meet growing inpatient needs, increasing its capacity to 84 beds.
- In response to numerous patient requests, and to control health care expenses, package prices were introduced for obstetric deliveries, common surgeries, lithotripsy and health screening programmes. Package prices have proved to be very popular, as they enable patients to have greater control over their outcome health care costs.
- Expansions were made in the Day Surgery Programme — where patients are admitted and discharged on the same day, eliminating high hospitalization costs for minor procedures. In addition to benefitting patients, the expanded Day Care Surgery programme will also increase the availability of more operating rooms for cardiac and other surgery.

New Developments:

•Major changes were introduced in the Medical Records System to complete tasks more efficiently and save time. These include a revised chart completion protocol which helps early completion of medical charts. Upgrading of the Medical Records on-line computer system eliminated telephone requests for patient files from outpatient areas, particularly for walk-in patients, thereby reducing waiting time at the Clinics.



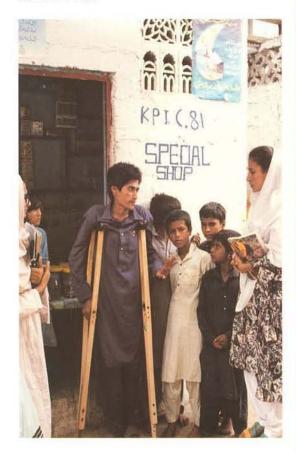
- In Information Systems, enhancements took place within the Materials Management System and the Critical Care Management System. Major developments during 1993 included new systems for Payroll, Laboratory, Inventory Control, Facilities and Equipment Management, and computerisation of the Hospital's Clifton Phlebotomy Station. Development of a Clinical Manager System will enable efficient on-line management by maintaining records of the patient's current and future appointments, registration, charges, visit records (including diagnosis and prescription) and surgical record. The automated Clinical Manager System will enable the Clinics to be run more efficiently by reducing patient waiting time, and by providing a centralised database to the clinician.
- New training programmes were introduced in a number of areas, including medical transcription, medical records coding, dietary and food service.

- •A total of 18 B.Sc.N. graduates returned to the Nursing Division at AKUH, and as a result all Assistant Nursing Managers, 95% of the Head Nurses, and 50% of the Assistant Head Nurses now hold Baccalaureate degrees in Nursing, and are better prepared and qualified to work in managerial positions.
- · As part of her PhD project, Nelofer Athar, Manager of Nutrition and Food Services, developed an enteral formula using Pakistani indigenous food items, and conducted a pilot study under the supervision of Dr. Mushtaq Ahmed, Professor in the Department of Surgery. This nutrition intervention formula supplements the dietary requirements of patients suffering from diseases such as Cancer, HIV/AIDS and Malnutrition, and can also be given to certain pre and postoperation patients. This easily prepared formula provides one calorie per millilitre, and could soon be proposed in hospital settings given its better nitrogen ratio (higher protein content) and affordable cost to patients.
- The medical internship programme at AKUH was opened for the first time to graduates of other recognized medical colleges, and 48 internship positions were offered to selected outside candidates.
- The Continuing Medical Education Programmes at AKU help disseminate within the physician community new developments in health care, thereby expanding the knowledge base and expertise of health professionals both on and off-campus. Ten such educational programmes were held in 1993, and included topics such as: "Infection Control in the Doctor's Office", "Ambulatory Care of the Cirrhotic Patient", and "Rational Use of Drugs in Paediatrics". Over 1500 physicians, of whom 70% were general practitioners, enrolled in these programmes. To benefit a larger number of physicians, this programme is also being scheduled in other cities of Pakistan.
- "Signs, Symptoms and Care", a new Public Health Awareness programme, was introduced at AKUH. Over 2000 people from the general public attended eight lectures given by AKU Faculty. The emphasis was on the importance of regular health screening programmes, and awareness of timely diagnosis of health problems. Topics included: Hypertension; AIDS; Cancer; Malaria; and Child's Growth and Development.

Patient Welfare Programme:

As in previous years, the Hospital made its services accessible to poor and needy patients who could not afford the full cost of their treatment. In 1993, Rs. 31 million was allocated for direct remission of charges, and another Rs. 30 million in subsidies, thereby helping to lower treatment charges below actual cost, to make them more affordable to the general public. The Welfare Programme owes its existence to the generosity of donors, and is supplemented through other activities on campus such as the volunteer run Gift and Flower Shops, as well as the sale of AKUH greeting cards. Over 11,500 needy patients from Karachi, the rural areas of Sindh, Balochistan and Punjab, and remote villages in the Northern Areas have availed the services of the Hospital through this Programme.

One of the lives touched by the generosity of AKU's countless donors who make this humanitarian endeavour possible was that of little Jaffar. Among the many who benefitted from the Hospital's Welfare Programme, his story merits a special mention as he was only a few hours old when he underwent a rare, reconstructive, and prolonged surgery which saved his life.



Born to Live

Jaffar was born with a hole in the muscles near his umbilicus through which his intestines and stomach were protruding outside his body. Such a condition is a birth defect that occurs for unknown reasons, and is called gastroschisis.

The little boy was born through a caesarean section. A neonatologist and the paediatric surgeon were present in the operating room to examine the baby. As suspected from an earlier ultrasound scan, the intestines and stomach were lying outside the abdominal cavity, matted and swollen due to constant bathing with the mother's amniotic fluid. They were covered carefully with sterile gauze to prevent infection and the baby was rushed to the Neo-Natal Intensive Care Unit (NICU). Here intravenous fluid (a drip) and antibiotics were started. Blood tests and x-rays were taken to prepare the baby for surgery later that day.

During the delicate surgery it became evident that the baby's abdomen was too small to accommodate all the swollen intestines. As a result, a sheet of fine synthetic material was stitched to the edges of the defect in the muscles to form a pouch to cover and protect the intestines. The newborn was returned to the NICU where he was immediately put on a breathing machine, a ventilator, which did the breathing for him and provided the correct amount of oxygen.

Each day, as the swelling decreased, some of the intestines were squeezed back gently into the abdomen and the size of the pouch reduced. By the end of the week, all the intestines were within the abdomen, and the muscles could be pulled together with sutures to close the hole in the abdomen.

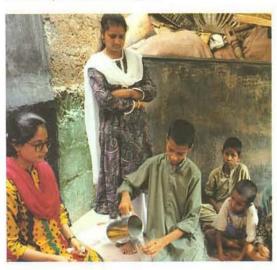
Until this point, Jaffar's nutrition consisted only of intravenous fluids. Thereafter oral feeds began gradually, and within the next two to three weeks he was tolerating breast milk, and his drips were discontinued. Approximately five weeks after his birth, the proud parents took a healthy little boy home. He was one among the many precious lives saved yearly in the NICU.

Though the family came from a middle class background, this highly technical, protracted and rare medical treatment was beyond their means. The Patient Welfare Programme at AKUH helps provide welfare assistance to thousands of needy patients each year. Little Jaffar who is now an active and energetic one year old, is one of the many beneficiaries of the Welfare Programme at AKUH.

The Laboratory:

The Laboratory conducted almost three million tests in 1993, an increase of 20% over 1992. New diagnostic and patient management techniques introduced included: Investigations for Thrombosis; Western Blot Test for confirmation of HIV infection; Immunological Marker Studies for leukaemia; and the use of Atomic Absorptiometer for measurement of trace metals like lead.

To facilitate public accessibility and convenience, the Laboratory also opened three more phlebotomy or collection centres — two in Karachi and one in Faisalabad. Samples collected from Faisalabad are despatched by an evening flight to Karachi, and the results are sent back the following day to Faisalabad. This now brings the total number of centres to six in Karachi, and two elsewhere.



Quality Improvement:

In 1993, steps to implement the Continuous Quality Improvement (CQI) concept at AKUH began. This remains a high priority. The Hospital's Joint Staff Committee, consisting of the Chairpersons of Clinical Departments and Senior Administrative Managers, has assumed responsibility for managing the process and begun to function in the role of a CQI "Quality Council". This group is responsible for overseeing all aspects of implementing the CQI programme. Supervision at this level will ensure that multidisciplinary collaboration takes place effectively. Some initial tasks to be undertaken by the Joint Staff Committee include setting TOM priorities to be addressed by Quality Improvement Teams (QITs), The Committee also monitors the progress of the QITs, ensuring that



the required training of staff and faculty is accomplished, as well as plan the integration of medical and nursing Quality Assurance programmes into the Hospital's Total Quality Management and Continuous Quality Improvement Programmes. In this context, eight representatives from AKUH participated in an Aga Khan Health Services workshop on TQM in Nairobi in 1993. On their return, they provided training to over 100 faculty members in TQM and CQI methodologies at AKUH.

Issues and Challenges:

While AKUH is steadily building its services and reputation, many issues and challenges remain. Recruitment, retention and development of highly qualified medical and nursing staff remains a priority. Not only balancing, but succeeding in attainment of the seemingly contradictory goals of providing care of the highest quality, while achieving financial self-sustainability and being affordable to a wide sector of the population is a major challenge that we have only begun to address, but the first results are already visible.

Volunteers at AKU:

Since 1988, every week over 300 volunteers provide invaluable service in 48 departments at the AKU campus. Especially noteworthy during the year was the work of volunteers in the Department of Community Health Sciences. Since the past two years trained physiotherapists and occupational therapists have been working voluntarily in the 'katchi abadis' (squatter settlements) of Karachi. Their work involves rehabilitation of the physically handicapped, and creating community awareness of the benefits of early identification of progressive diseases and their appropriate treatment.

Levi N. Hilling Director-General, AKUH

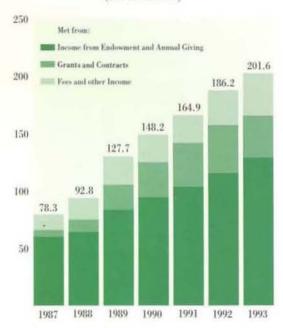
FINANCE AND FUNDING

Faculty of Health Sciences

In 1993, student fees and related incidental income covered 18% of the cost of education. The balance was met through grants, income from endowment and annual giving at the University, Over the past seven years, the Faculty of Health Sciences' (FHS) operations have been increasingly supported by income from endowment and annual giving, which in 1993 constituted 64% or Rs. 129 million. The magnificent generosity of our donors has enabled the FHS to build a paid-up endowment of Rs. 1.48 billion (US\$ 49 million), and additional payments continue to be received each year from past pledges. The FHS is moving ahead on a path of controlled expansion and frugal management in line with the development of its endowment resource base. The charts illustrated depict how FHS has met its total operational requirements in the last seven years. The growth of its endowment fund in this period is also shown graphically.

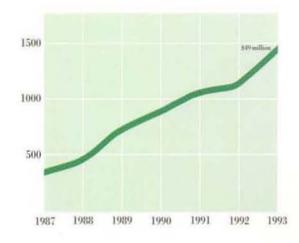
AGA KHAN UNIVERSITY (FHS)

Operational Requirements (Rs. in millions)



AGA KHAN UNIVERSITY (FHS) Growth of the Endowment Fund

Growth of the Endowment Fund (Rs. in millions)

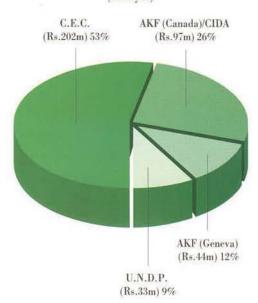


Institute for Educational Development

In its tenth year the Aga Khan University is well-positioned to begin implementation of its long-term strategies into other areas of higher learning. A major new initiative was the Institute for Educational Development (IED), which began operations with a secured six year grant funding of US\$ 12.5 million mobilized by the Aga Khan Foundation, including US\$ 1.5 million from its own resources. Other donor agencies who have generously pledged contributions are: the Commission of the European Communities (CEC). Canadian International Development Agency (CIDA), and the United Nations Development Programme (UNDP). The total funding and its application over the next six and a quarter years is illustrated. During the first phase, IED's programmes will be managed within the resources already secured, and assuming its programmatic success, the University is exploring sources to secure the longer term needs of the Institute.

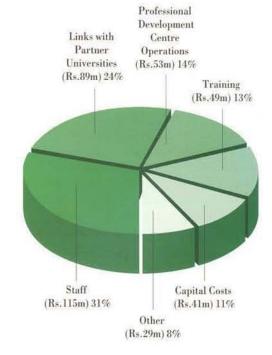
AGA KHAN UNIVERSITY (IED)

Sources of Funds (Rs. 376 m) 1993 (6.25 yrs)



AGA KHAN UNIVERSITY (IED)

Application of Funds (Rs. 376 m) 1993 (6.25 yrs)



Aga Khan University Hospital

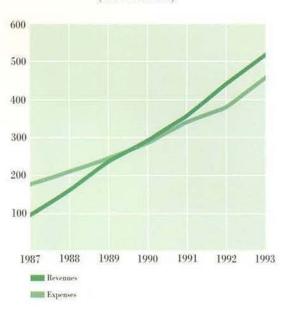
AKUH continues to progress toward self-sustainability through controlled growth. In 1993. revenues (Rs. 514 million) grew by 18% and expenses (Rs. 453 million) grew by 17% over the previous year. As a result, the Hospital was able to improve its cash flow generation, before providing for depreciation of assets and local debt servicing, to Rs. 61 million (US\$ 1.96 million) as compared to Rs. 48 million in 1992. This amount, which could have covered 72% of the depreciation expense, was utilized towards local debt servicing (Rs. 28 million) and for the purchase of equipment and other capital needs (Rs. 33 million). The graph depicts the growth of revenues over expenses before meeting depreciation and debt servicing. over the past seven years.

Two key objectives of the Hospital are to support patient welfare and achieve financial self-sustainability. Through its Welfare Programme in 1993, the Hospital provided direct financial assistance amounting to Rs. 31 million (US\$ 1 million) to indigent patients. An additional Rs.30 million were released in subsidies to make its services more affordable and accessible. This direct financial assistance was sourced from income from the Hospital's Patient Welfare Endowment and annual giving. This generous donor support has enabled the Hospital to keep both of its seemingly conflicting objectives intact. It is indeed gratifying to report that in the seven years since this endowment was launched, it has grown to Rs. 348 million (US\$ 11.6 million). The growth of the endowment in this period is illustrated below.

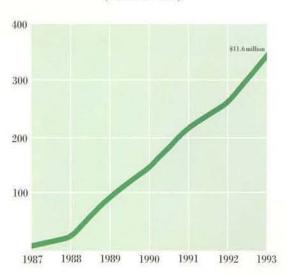
As the Hospital is the primary teaching facility for AKU's Faculty of Health Sciences, AKUH and the Faculty are closely related operating entities. The Hospital's key financial objectives for the next decade are to repay its local debt, generate sufficient cashflow to meet its equipment replacement requirements, and become a net contributor to the Faculty of Health Sciences' programmes. It plans to achieve these objectives through tight control on expenses, a balanced expansion of its existing services, and by adding new clinical programmes which fulfil community needs and also contribute to the institution's financial sustainability.

AGA KHAN UNIVERSITY HOSPITAL

Revenues over Expenses (Before Depreciation and Debt Servicing) (Rs. in millions)



AGA KHAN UNIVERSITY HOSPITAL Growth of the Patient Welfare Endowment Fund (Rs. in millions)



The Aga Khan University Stadium Road, P.O. Box 3500 Karachi 74800, Pakistan







